Illinois Environmental Protection Agency

CAFO FIELD PROCEDURES MANUAL

Field Operations Section

Division of Water Pollution Control

Revised February 2013

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Introduction

A. Purpose of Manual

The purpose of this Concentrated Animal Feeding Operation (CAFO) Field Procedures Manual is to provide a field inspector with a general overview of the National Pollutant discharge Elimination System (NPDES) CAFO regulations and inspection guidance. This document has been prepared by the Field Operations Section, Division of Water Pollution Control for internal use as a training tool and as a reference document for experienced staff. It should be noted that a significant amount of information contained within this field procedures manual was obtained from Chapter 16 of U.S. EPA's National Pollutant Discharge Elimination System Compliance Inspection Manual. While it is intended to serve as general procedural guidance, it cannot cover all circumstances which arise in the field. Each employee is responsible for exercising good judgment in carrying out field work in a safe, professional manner. This document shall serve as a supplement to the "Field Procedures Manual" that is currently used by Field Operations Section, Division of Water Pollution Control Staff.

An additional objective of this document is to serve as a management tool to help achieve consistency in dealing with regulated facilities and the public. As representatives of a state government Agency, Field Operations Section, Division of Water Pollution Control field staff must ensure that activities are carried out fairly, equitably, in accordance with the law, and without prejudice or discrimination. These principles are to be followed at all times when conducting field activities. It is equally important that compliance and enforcement activities are consistent from region to region, across the State.

This document is not intended to serve as a technical reference or as a training manual for regulatory programs. Extensive technical reference materials are available in each regional office and through the Agency library to provide information that is beyond the scope of this manual.

This manual does not create rights, substantive or procedural, enforceable by any party in litigation with the Agency and any prosecuting authority. Similarly, it does not diminish any substantive or procedural rights provided by statute or constitutional doctrine. The Agency is not legally bound by this manual and reserves the right to act at variance with it and to change it at any time without public notice.

B. Legal Authority for CAFO Inspections

Section 301(a) of the Clean Water Act (CWA) established regulatory requirements for the discharge of pollutants from point sources to waters of the United States. Under the CWA

Section 502(14) and its implementing regulations at 40 CFR Part 122, CAFO's can be point sources and, if a livestock waste discharge occurs, are subject to the NPDES Permitting requirements.

The Illinois Environmental Protection Act (415 ILCS 5/1 et seq.) is the source of the Agency's authority for field inspections. The relevant sections include the following:

Section 4 (b), which provides, in part, that the Agency shall have the duty to collect and disseminate such information, acquire such technical data, and conduct such experiments as may be required to carry out the purposes of this Act, including ascertainment of the quantity and nature of discharges from any containment source and data on those sources.

Section 4 (c), which provides, in part, that the Agency shall have the authority to conduct a program of continuing surveillance and of regular or periodic inspection of actual or potential contaminant sources.

Section 4 (d), which provides, in part, that in accordance with constitutional limitations, the Agency shall have the authority to enter at all reasonable times upon any private or public property for the purpose of inspecting or investigation to ascertain possible violations of the Act or of regulations thereunder, or of permits or terms or conditions thereof.

In addition, Standard Condition 9 of all NPDES Permits states:

Inspection and entry. The permittee shall allow an authorized representative of the Agency, upon presentation of credentials and other documents as may be required by law, to:

a. Enter the permittee's premises where the regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

Finally, 35 Illinois Administrative Code 501.406 contains the following language regarding livestock facility inspections:

a. The Agency shall have the authority to enter at all reasonable times upon private or public property for the purpose of inspecting and investigating to ascertain possible violations of the Act or regulations thereunder, in accordance with constitutional limitations…

b. The activities of inspecting and investigating include:

1. Having access to and the right to copy any records required to be kept under the terms of the permit; and

2. Having access to sampling and monitoring any discharge of pollutants to ground and surface waters.

C. Responsibilities of the CAFO Inspector

Generally, field activities are conducted for the purpose of collecting and evaluating information to be utilized by Agency programs, making technical evaluations of facility performance intended to maintain regulatory compliance, and providing information to facilities and the public regarding water pollution.

An important reason for collecting the information is to gather evidence for compliance or enforcement activities. Any information obtained during the course of a field visit has the potential to become part of a future enforcement case. Therefore, all inspection work must be accurate and follow legal requirements for admissibility of evidence. Field staff is expected to be familiar with applicable water pollution control laws, regulations, permits, and policies. Proper evidence collection procedures must be learned and followed.

Because an enforcement action depends in large measure on the evidence gathered during field work, observations made during the field activities must be properly recorded to serve in preparing the inspection report, determining the appropriate enforcement response, and giving testimony in an enforcement case.

Another goal of field activities is to provide information to the regulated entities and the public. Field staff should be adequately prepared to advise facility representatives on the applicable regulations, permits, and Agency programs.

In summary, the primary role of a CAFO inspector is to gather information to evaluate compliance with the NPDES CAFO permit conditions, compliance with any other applicable regulations, and to assess whether an NPDES CAFO Permit is warranted. A copy of the NPDES CAFO General Permit is located in Appendix C. The CAFO inspector also plays an important role in enforcement case support, and permit development. To fulfill these roles, the CAFO inspector must know and abide by applicable regulations, permits, policies, and procedures; legal requirements concerning inspections; procedures for effective inspection and evidence collection; accepted health and safety practices; and quality assurance standards.

CAFO Definitions

This section defines what the term "animal feeding operation" (AFO) is and explains which AFOs are Concentrated Animal Feeding Operations (CAFOs).

Animal Feeding Operation (AFO) - A lot or facility where the following conditions are met:

1. Animals have been, are or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period, and

2. Crops, vegetation, or forage growth or post-harvest residues that are grown in place are not sustained in the normal growing season over any portion of the lot or facility.

Concentrated Animal Feeding Operation (CAFO) - An operation must be defined as an AFO before it can be defined as a CAFO. Whether an AFO is a CAFO depends primarily whether there is a discharge of livestock waste to a river, lake or stream.

An AFO may also be defined as a CAFO if it has a certain number of animals and it meets other regulatory requirements. The regulations set thresholds for size categories (Large, Medium, and Small) based upon the number of animals confined at the livestock facility.

What is a Large CAFO?

An AFO is defined as a Large CAFO if it stables or confines as many or more than the numbers of animals specified in any of the following categories:

- 700 mature dairy cows, whether milked or dry;
- 1,000 veal calves;
- 1,000 cattle other than mature dairy cows or veal calves. "Cattle" includes but is not limited to heifers, steers, bulls and cow/calf pairs;
- 2,500 swine, each weighing 55 pounds or more;
- 10,000 swine, each weighing less than 55 pounds;
- 500 horses;
- 10,000 sheep or lambs;
- 55,000 turkeys;
- 30,000 laying hens or broilers, if the AFO uses a liquid manure handling system;
- 125,000 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
- 82,000 laying hens, if the AFO uses other than a liquid manure handling system;
- 30,000 ducks (if the AFO uses other than a liquid manure handling system); or
- 5,000 ducks (if the AFO uses a liquid manure handling system)

What is a Medium CAFO?

The term Medium CAFO includes any AFO with the type and number of animals that fall within any of the ranges listed below and which has been defined or designated as a CAFO. An AFO is defined as a Medium CAFO if:

1. The type and number of animals that it stables or confines falls within any of the following ranges:

   • 200 to 699 mature dairy cows, whether milked or dry;
   • 300 to 999 veal calves;
   • 300 to 999 cattle other than mature dairy cows or veal calves. "Cattle" includes but is not limited to heifers, steers, bulls and cow/calf pairs;
   • 750 to 2,499 swine each weighing 55 pounds or more;
   • 3,000 to 9,999 swine each weighing less than 55 pounds;
   • 150 to 499 horses;
   • 3,000 to 9,999 sheep or lambs;
   • 16,500 to 54,999 turkeys;
   • 9,000 to 29,999 laying hens or broilers, if the AFO uses a liquid manure handling system;
   • 37,500 to 124,999 chickens (other than laying hens), if the AFO uses other than a liquid manure handling system;
   • 25,000 to 81,999 laying hens, if the AFO uses other than a liquid manure handling system;
   • 10,000 to 29,999 ducks (if the AFO uses other than a liquid manure handling system); or
   • 1,500 to 4,999 ducks (if the AFO uses a liquid manure handling system);

2. **AND** either one of the following conditions is met:

   • Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; **OR**

   • Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.

What is a Small CAFO?

Small CAFOs are AFOs that confine fewer than the number of animals that defines a Medium CAFO, meet specific discharge criteria, and have been designated as CAFOs.

35 Illinois Administrative Code 502.106 (a) provides, in part, that the Agency may require any animal feeding operation to obtain a permit. In making such designation, the Agency shall consider the following factors:

1. The size of the animal feeding operation and the amount of wastes reaching navigable waters;

2. The location of the animal feeding operation relative to navigable waters;

3. The means of conveyance of animal wastes and process wastewaters into navigable waters;

4. The slope, vegetation, rainfall, and other factors relative to the likelihood or frequency of discharge of animal wastes and process wastewaters into navigable waters; and

5. Other such factors being on the significance of the pollution problems sought to be regulated.

In addition, 35 Illinois Administrative Code 502.106 (b) provides, in part, the Agency may not require a (NPDES) permit for any animal feeding operation with less than 300 animal units (see page 9 for animal unit definitions) unless it meets either of the following conditions:

1. Pollutants are discharged into navigable waters through a man-made ditch, flushing system, or other similar man-made device; or

2. Pollutants are discharged directly into navigable waters which originate outside of and pass over, across, through, or otherwise come into direct contact with the animals confined in the operation.

In no case may a permit be required from a designated animal feeding operation until there has been an onsite inspection of the operation and a determination that the operation should and could be regulated under the permit program. Also, no application may be required from an owner or operator of a designated animal feeding operation unless the inspector observes evidence of a discharge and the owner or operator is notified in writing of the requirement to apply for the permit.

AFOs With More Than One Animal Type

An AFO is defined as a CAFO if any one animal type in confinement meets the threshold for either a Large or Medium CAFO. Under the revised NPDES CAFO regulations, multiple types of animals are not counted together to determine the type and size of a CAFO.

What is an animal unit?

"Animal unit" means a unit of measurement for any animal feeding operation calculated as follows:

- Brood cows and slaughter and feeder cattle multiplied by 1.0.
- Milking dairy cows multiplied by 1.4.
- Young dairy stock multiplied by 0.6.
- Swine weighing over 55 pounds multiplied by 0.4.
- Swine weighing under 55 pounds multiplied by 0.03.
- Sheep, lambs, or goats multiplied by 0.1.
- Horses multiplied by 2.0.
- Turkeys multiplied by 0.02.
- Laying hens or broilers multiplied by 0.005.
- Laying hens or broilers multiplied by 0.01 (if the facility has continuous overflow watering).
- Laying hens or broilers multiplied by 0.03 (if the facility has a liquid manure handling system).
- Ducks multiplied by 0.02.

For species of animals in an animal feeding operation not specifically listed in this definition, the animal unit factor shall be determined by dividing the average mature animal weight by 1,000. The average mature animal weight shall be determined with guidance from the University of Illinois Cooperative Extension Service.

CAFO Facility Summary

This section provides a brief synopsis of several livestock operations that might take place at a CAFO and some of the elements to note when conducting a CAFO inspection. When inspecting a facility, the following areas are of concern: animal housing, feeding, and maintenance areas; livestock waste collection and transport; livestock waste storage and treatment; and livestock waste land application.

1. Animal Housing, Feeding, and Maintenance Areas

Housing areas can be indoor facilities with concrete, metal grate, gravel, clay, or packed earth flooring. Outdoor areas can include earthen feedlot area void of significant vegetative cover, concrete feedlot areas, or pasture land. It should be noted that pasture areas are not subject to regulation as part of a CAFO, except with respect to their use as manure application sites.

Stormwater controls, such as grading, dikes, curbs, and berms, are important components of pollution control and prevention in livestock housing areas. Bedding material, if provided, can consist of peat moss, sawdust, shredded newspaper, straw, sand, or other materials.

Soil compaction in dry cow lots, loafing areas, or exercise yards prevents water infiltration and causes ponding and runoff.

Swine housing areas are often enclosed confinement buildings, dirt lots, or outdoor concrete pads. Poultry housing areas are usually enclosed confinement buildings.

Feeding areas inside buildings are often troughs; outside areas typically have a concrete, gravel, or packed-earth surface with troughs or a feed bunker. Although a water trough increases animal traffic in the immediate area, it is advantageous because it allows the operator to restrict access to any streams previously used for livestock watering. Poultry houses use feeding bins or trays; water is provided continuously or through on-demand systems such as nipple or cup drinkers.

Animals may spend time in non-pasture areas that are for neither housing or feeding purposes. These areas may be for such activities as milking, shearing, birthing, breeding, or sales display. If these areas are not pastured areas, they are part of the CAFO.

2. Livestock Waste Collection

Dry manure is usually collected by being pushed or scraped to a manure stacking area. The stacking area allows the facility to store the manure until weather permits proper land application. Slurry manure is generally collected by scraper or pumped after the addition of

small amounts of water. Liquid manure is generally collected by flushing with large amounts of water. For indoor facilities, manure may be removed by an automated spraying system, a scraping system, a flushing system beneath the metal grates, or manual removal.

In poultry houses with dry manure systems, the manure that builds up adjacent to the feed and water devices forms a cake (crust). The collection and removal of that cake is called cake removal or crust-out. Poultry houses usually crust out the manure following each flock. A machine called a cruster is often used for this process in poultry houses. Poultry operations with liquid manure systems collect the manure in long pits underneath the birds' cages.

Large earthmoving equipment is used to collect manure at large cattle feedlots. Beef cattle pens are usually cleaned after each set of cattle is marketed.

Most enclosed swine operations house the hogs on a slotted floor that allows the manure and waste feed to drop through for removal. Manure pits capture the manure as it falls from the animals' containment area. Swine manure removal methods include under-floor flush, open-gutter flush, pit recharge, and hosing. Some older swine facilities may utilize open front confinement units. Liquid manure from these units typically flows by gravity to constructed gutter. Solid manure is also scraped into this gutter. From the gutter, manure is transferred, either through mechanical pumping or gravity flow, into the facility's livestock waste storage and treatment system.

Dairy facilities remove manure through slotted floors, use gutter cleaners or alley scrapers, or flush the alleys with water. Many dairies that remove manure by flushing also recycle this water for multiple flushes. Milking areas usually produce manure and process wastewater, which are generally channeled into the manure and process wastewater handling and storage system.

3. Livestock Waste Transport

The transport of manure is related to the solids content. Dry manure cannot be pumped; liquid manure cannot be scraped. Dry manure is usually transported directly to the land application site in a box-type manure spreader. Manure spreaders are commonly loaded by tractor bucket loaders or elevated conveyor units. Slurried and liquid manure can be pumped or flushed through pipes and concrete channels to storage or treatment processes. The pipes can be above or below the ground.

Slurry and liquid manure are often loaded into tank trucks or tractor-drawn tanks. Tankers are often loaded by stationary pumps, pumps located on a floating barge, and moveable

pumps operated by a tractor PTO drive. Liquid manure is often transported by pumping through permanent and temporary piping to irrigation devices.

4. Livestock Waste Storage and Treatment

Livestock Waste Storage and Treatment systems must be designed to ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities.

In most cases, manure is stored for some period between manure production and manure disposal. This storage can be long-term, 120 days (35 Illinois Administrative Code 501.404(c)(4)(B)) or more, or short-term. Manure storage is necessary where disposal or application immediately after collection and removal is impossible or impractical. One such situation is avoiding the application of manure during poor meteorological conditions. For example, if manure is applied during the winter months, it is more likely that the melting snow and spring rains will wash away most of the nutrients before the ground thaws enough to absorb them. Manure is stored in three forms: solid, semisolid, and liquid.

Long-term storage usually consists of liquid or semi-solid manure, and the storage vessels typically consist of lagoons or tanks made from glass-lined steel, poured concrete, or earthen waste storage pits. Manure is typically stored for a period of time and then land applied. Liquid or semisolid waste may be treated in a lagoon. Manure in lagoons is biodegraded by bacteria using aerobic or anaerobic processes. To provide an oxygen supply, aerobic lagoons must have aeration equipment or larger surface areas than anaerobic lagoons.

During an inspection, the inspector may encounter manure that is stored in piles in fields or pastures, piles on feedlots and in livestock pens, or a watertight manure pit with a concrete- or clay-lined bottom. Short-term-storage manure (temporary manure stacks) is usually in solid form. Temporary manure stacks shall be constructed or established and maintained in a manner to prevent runoff and leachate from entering surface or ground water. Solid-manure storage areas sometimes have a grass filter strip to absorb any nutrients from leachate. No temporary manure stack shall be constructed within 100 feet of any water well (35 Illinois Administrative Code 501.404(b)(2)). In some cases, solid manure might be composted. Operations that store manure in piles exposed to rainfall in fields or pastures are considered to have a liquid manure handling system. However, any livestock waste stored in excess of six months shall be contained in a permanent manure storage structure (35 Illinois Administrative Code 501.404(a)).

Liquid and semi-solid dairy wastes are typically stored using the slurry method or the lagoon method. Slurry storage is usually in a pit, slurry storage tank, or earth basin. Livestock waste in lagoons is usually diluted with water from flush systems or milking parlor washdown. Typically, the slurry storage or lagoon storage facilities are preceded by a concrete or earthen settling basin. The purpose of the basin is to settle out manure solids prior to entering the slurry storage or lagoon storage facilities. Dairy facilities utilizing sand as bedding material typically have a sand-trap settling basin preceding the manure solids settling basin. The purpose of the sand-trap settling basin is to settle out sand prior to it entering the solids basin. The recovered sand can be reused or land applied. Permanent manure stacking areas are also common at dairy facilities. Any leachate from the manure stacking area must be properly contained.

5. Livestock Waste Land Application Activities

Land application is the most common form of manure use at CAFOs. Solid manure is usually spread using a mechanical manure spreader. Liquid manure can be applied by an irrigation system or surface applied by truck or tanker. It is sprayed on the surface (and, in some cases, later incorporated into the soil) or injected into the soil. Swine operations commonly use manure spreaders for solids or traveling irrigators, permanent irrigation systems, tankers equipped with injection equipment, or drag-line type injection.

The CAFO is to conduct land application of manure and process wastewater in accordance with their site-specific Nutrient Management Plan and NPDES CAFO permit minimum practices.

CAFO Pre-Inspection Activities

An inspection of an AFO or CAFO may be conducted for the following reasons:

1. Compliance Evaluation Inspection (CEI) at a permitted facility to evaluate the facility's compliance with the requirements of their NPDES Permit.

2. Inspection of a non-permitted AFO to determine whether the facility meets the definition of a CAFO, whether the facility has caused, threatened, or allowed water pollution, and whether the facility should apply for an NPDES Permit.

3. Routine Reconnaissance Inspection (RI).

4. Follow-up to a citizen complaint.

5. Case support after a violation has been identified.

6. To determine whether a facility should be designated as a CAFO.

7. Follow-up inspection to determine if a facility has implemented required controls or BMPs.

8. Compliance inspection to ensure compliance with settlement agreements.

The CAFO inspector's responsibility is to gather information that can be used to evaluate compliance with permit conditions, applicable regulations, and other requirements. Inspectors should be familiar with the conditions of the facility's NPDES permit and all applicable regulations. Prior to conducting an inspection, an inspector should complete the following specific pre-inspection activities:

1. Become familiar with the facility location and its geographic features. This includes reviewing existing or internet based topographic maps, aerial photographs, and plat books of the livestock facility.

2. Conduct a file review for the livestock facility. This includes reviewing previous inspection reports, submitted records for reporting required under the NPDES Permit, general correspondence, and enforcement actions.

3. Review the conditions of the facility's NPDES Permit.

4. Prepare sampling equipment for CAFO inspection. This includes sampling bottles with preservatives, sample coolers, ice/icepacks, laboratory sheets, etc.

5. Determine whether there are any potential bio-security issues at the facility. An inspector should make sure that disposable sanitary footwear and sanitized outer garments are available during each inspection. An inspector should contact Dr. Mark Ernst, State Veterinarian, with Illinois Department of Agriculture at 217/782-6657 if there are any concerns related to animal health outbreaks.

Selection of Facilities for Inspection

If possible, the inspection of CAFO facilities should be conducted during or immediately following precipitation events. CAFO facility inspections at animal feeding operations are typically Compliance Evaluation Inspections, where the facility is being inspected primarily to determine compliance with the requirements of the Clean Water Act.

Some facilities are selected for inspection based on "probable cause," which means that the Agency has obtained specific evidence of a possible existing violation at a facility. Inspections are conducted in response to citizen complaints about a specific facility, emergency situations such as reports of ongoing spills, information about specific water quality problems or fish kills, or as a follow-up to prior inspections indicating violations at the same facility or at other facilities owned or operated by the same person. Priority should be given to facilities that meet one or more of the following criteria:

- Large CAFOs
- Priority watersheds impaired by runoff from AFOs
- Subject of citizen or government complaints
- Watersheds with high AFO or CAFO density
- Near surface waters
- Potential for large amounts of animal waste to reach surface water
- Non submission of required recordkeeping by the CAFO

Some inspections may be conducted at facilities where Illinois EPA does not have any prior information indicating that there are existing violations. These are routine inspections to evaluate compliance.

CAFO On-Site Activities

A. Prevention of Disease Transmission

35 Illinois Administrative Code 501.406 includes the following requirement related to livestock facility inspections:

"…No representative of the Agency shall enter a livestock management facility or livestock waste handling facility unless sanitized footwear and sanitized outer garments provided by the Agency are used (unless waived by the farm owner or operator) and any other reasonable disease prevention procedures or equipment, as provided by the owner or operator of the facility, are utilized."

This regulation is to be strictly complied with during all livestock management facility and livestock waste handling facility inspections.

The following biosecurity procedures are intended to be used by Agency staff in order to conform with Ill. Adm. Code 501.406 and to reduce, as much as practical, the risk of introducing pathogens during an Agency inspection. Biosecurity procedures must be used during all inspections of livestock management facilities or livestock waste handling facilities. When dealing with emergency situations (e.g., waste releases, improper mortality disposal, fishkills, etc.), the procedures below may be reduced in order to expedite the Agency's response to protect human health and the environment. Caution should be exercised by Agency personnel when standard biosecurity procedures are reduced as a result of an emergency response and when the herd health status is unknown. In all cases, staff should record the procedures taken.

Prior to entering a livestock management facility or livestock waste handling facility (except emergencies, as described above), inspectors should discuss with the owner or operator the facility biosecurity requirements, including the following:

1. Sanitized footwear and sanitized outer garments.
2. Any other reasonable disease prevention procedures or equipment, as provided by the owner or operator.

An owner or operator may choose to waive the use of sanitized footwear or sanitized outer garments. However, even when waived, staff should wear sanitized footwear during inspections of livestock management/livestock waste handling facilities. If an owner or operator does not advise inspectors that the use of sanitary outer garments is required, it shall be implied that the use of such outer garments is not a requirement at the livestock

management facility or livestock waste handling facility. Any facility waivers to the requirements of Section 501.406, should be noted in the inspection report or checklist. If an Agency inspector believes an unreasonable request has been made under item #2 above, the inspector will contact their supervisor for guidance.

When the owner or operator of a livestock management/livestock waste handling facility is not contacted prior to an inspection (e.g., unannounced inspections, time was not available prior to the inspection, no one or no known party could be contacted) and at the time of the inspection staff are asked to provide what they believe is an unreasonable disease prevention procedure or to use equipment they believe is unreasonable, staff will immediately contact a supervisor.

In discussing biosecurity procedures in non-emergency situations with the facility owner or operator prior to an inspection, Agency staff will need to address the following:

a. Personal protection: Arrange for proper use of outerwear as discussed above. If feasible, a minimum 24 hour downtime should be used for same species visits. Similarly, there should be at least 24 hours downtime following visits to fairs, shows, livestock sales, livestock sale barns, and exhibitions with livestock or which have housed livestock within the previous 24 hours. If an inspector has traveled internationally and had contact with livestock, there should be at least 48 hours downtime between farm inspections. If an inspector has traveled internationally to a country with Foot and Mouth disease, there should be at least 5 days of downtime. If an inspector is recovering from flu-like symptoms or other contagious diseases, livestock facility inspections should be postponed until the inspector is symptom free for 24 hours. If an inspector arrives to conduct a CAFO inspection, and it is revealed by the owner or operator that the facility is undergoing or recovering from an active disease issue, a non-emergency inspection should be postponed until the livestock have recovered. In all cases, used disposable outerwear should be left at the facility for disposal or placed in a plastic bag for later disposal.

b. Vehicle care and parking: Prior to an inspection of a livestock management facility/livestock waste handling facility, inspection vehicles should be washed. If the inspection vehicle is not washed prior to the inspection, the vehicle parking location should be 300 feet from the livestock management facility/livestock waste handling facility or at a parking location agreeable to the facility owner or operator. However, the vehicle must be located at a location which will allow the inspector safe access/egress from the site. Establish a clean and contaminated area in the vehicle for storage of gear. Use anti-bacterial wipes or sprays, as necessary, on foot pedals and floormats if sanitized footwear are not used during the inspection.

c. Equipment cleaning: To the extent practical, clean all equipment removed from the vehicle, such as pens, cameras, coolers and clipboards, with anti-bacterial wipes.

d. Planning: Plan inspections such that areas of the livestock management/livestock waste handling facility that have a high susceptibility of pathogen introduction are inspected prior to areas of lower susceptibility.

Planned site visits that allow Agency staff to discuss biosecurity in advance with the owner or operator are not always possible and may not allow for proper and complete inspection. Biosecurity then becomes the responsibility of the inspector. Agency staff should take a conservative approach, making preparations for biosecurity needs prior to an unannounced visit, allowing for contingencies and additional requirements that may arise when addressing biosecurity procedures once at the facility.

When inspections are conducted with other Agency staff (i.e., BOA, BOL, DLC, etc.), the inspector must discuss biosecurity procedures in advance with those who will also be making the inspection. Additional outerwear and other cleaning supplies will need to be provided to those Agency staff.

Staff that maintain their own personal livestock must discuss with their supervisor any specific biosecurity issues that may arise.

Field staff are responsible for maintaining an adequate inventory of disposable sanitary footwear, sanitary outer garments, and anti-bacterial wipes or sprays for use when requested. Normal procedures for requisitioning supplies should be followed.

B. Facility Arrival

Upon arrival at the livestock facility, the inspector must be prepared to present the owner or operator credentials as a form of identification to gain access. Facility representatives may verify Agency employment by contacting the Agency's personnel office at 217/524-4157. During an inspection, the inspector should use the inspection checklist, a notebook for field notes, a digital camera for photographs, and a facility aerial photograph to document the locations of waste storage structures. Copies of aerial photographs may be obtained from www.earth.google.com, www.terraserver.com, etc.

The typical sequence of events during an inspection, are as follows:

1. Entry Interview
2. Record/document review
3. Facility Tour

4. Exit Interview
5. Sample Collection

Although most inspections are unannounced, livestock facility inspectors should be aware that they may have to call the facility prior to the time of the inspection to ensure that a facility representative is available to assist the inspector with the inspection process.

In some cases, a facility representative may be reluctant to give entry consent because of misunderstood responsibilities, inconvenience to the facility's schedule, antagonism toward the Agency, or other that may be overcome by diplomacy and discussion. Field staff should explain the purpose of the inspection and the authority for the inspection as described in the Act and NPDES Permit (for permitted facilities). During the inspection, field inspectors should avoid sensitive areas at the facility, such as entering a representative's residence. Whenever there is difficulty in gaining consent to enter or when excessive delays occur in obtaining entry, inspectors should tactfully question the reasons and work with the facility representative(s) to overcome the problems. Care must be taken to avoid threats of any kind, inflammatory discussions, or deepening of misunderstandings. Under no circumstances should the inspector discuss potential penalties, or say and/or do anything that could be construed as coercive or threatening.

If consent cannot be obtained or the situation is beyond the authority of the inspector to manage, leave the premises and contact supervisory staff for guidance. When access is denied or unreasonably conditioned (e.g. no photographs, access is limited in scope or duration), the inspector and/or supervisor should consult with a representative of Division of Legal Counsel (DLC) to determine if an inspection warrant is required. When returning to a site after an inspection warrant is obtained, the inspector should be accompanied by a member of law enforcement for safety reasons. An inspection warrant and escort by law enforcement should be sought in cases where the inspector returns to a facility when threats or attempts at intimidation have occurred in the past.

If the facility representative asks the inspector to leave the premises after an inspection has begun, the inspector should leave and contact supervisory staff and DLC for guidance. All activities conducted and information obtained before the withdrawal of consent are valid. The inspector should ensure that all Agency equipment and personal belongs are removed from the facility.

If access to some areas of the facility is denied during the course of the inspection, the inspector should note the circumstances surrounding the denial of access. The inspector should then proceed with the rest of the inspection. After leaving the facility, contact supervisory staff and DLC for guidance.

Do not enter any animal confinement area without prior authorization from the owner or operator. These areas include buildings, open lots, pastures occupied by livestock, or other area used for housing of transferring livestock.

Inspections of unattended facilities should generally be limited to areas visible from public roads and the facility driveway, unless the facility owner or operator has given field staff authorization to inspect other areas of the site in their absence. However, some situations, such as a fish kill or pollution occurrence may warrant a cautious observation of waste handling facilities in the absence of the facility representative. When field staff are unable to locate a facility representative, it is recommended that the inspector leave a business card or an "Inspection Advisory Letter" at the site with a call request. A copy the "Inspection Advisory Letter" is located in Appendix E.

1. Entry Interview

   The purpose of the entry interview is for the inspector to:

   a. Present the facility owner or operator with credentials authorizing the inspection.
   b. Seek consent for an on-site inspection.
   c. Discuss biosecurity concerns with the facility owner or operator.
   d. Inform the owner or operator of the scope and the purpose of the inspection.
   e. Provide information to the facility representative concerning the regulation of CAFOs.
   f. Obtain basic information about the facility, including (see inspection checklist):
      - Name, address, and telephone number of the facility.
      - Owner or operator of the facility.
      - Copies of specific records required by the permit.
      - History of the facility.
      - Solid and liquid livestock waste containment structure description.
      - The location of drains, irrigation ditches, and waterways nearby.
      - Any additional livestock facilities owned by owner/operator. Two CAFOs under common ownership are considered to be one operation for permitting purposes if they adjoin each other; or use a common land application area or a common system of waste disposal.

   The owners or operators of an unpermitted livestock facility may be unfamiliar with the Agency's programs and procedures. Therefore, additional efforts may be needed, especially during an initial visit to a facility, to explain the reason, objectives, and proposed plan for an inspection during an entry interview.

2. Record/Document Review

The inspector should ask to see the records required to be kept by the facility's NPDES permit, the specific management plans, and the records to verify that the facility is complying with the terms and conditions of the permit including documents required to qualify for the Agricultural Stormwater Exemption 122.42(e)(i) and (vi-ix).

Records that the inspector may ask the facility to produce, include the following:

- Livestock inventory records
- Local precipitation records
- Livestock waste containment structure freeboard marker readings.
- Livestock waste application records, such as the following:
    a. Date(s) of application
    b. Location(s) of applications
    c. Crop rotations
    d. Soil, manure, and wastewater nutrient testing results
- NPDES permit for the facility
- Lease(s) or rental agreements
- "Spreading agreements" if livestock waste is applied on land not owned or leased by the facility
- Construction plans or as-built drawings of the facility
- Comprehensive nutrient management plan

It may be necessary to ask a facility owner or operator to send in copies of documents, either mailed photocopies or electronic copies, to assist in preparation of the inspection report. These may include a site map of the facility, drainage information, discharge reports, etc.

3. Facility Observations

After reviewing the records and documents, the inspector should ask the facility representative to accompany him or her to observe the facility. The purpose of the facility tour is to assess existing conditions and confirm that the facility conforms to the description in the NDPES Permit. During the facility tour, the inspector should conduct an assessment to determine if the CAFO is discharging livestock wastes. The assessment should include, but is not limited to:

- Proximity of the CAFO to waters of the State, and if the CAFO is upslope from waters of the State.
- Climatic conditions, including whether precipitation exceeds evaporation; discharge history.
- Type of waste storage system, and the capacity, quality of construction and presence and extent of built-in safeguards of the storage system.
- Management of mortalities.
- Standard operating procedures and quality of maintenance protocols, e.g., for equipment, infrastructure, etc.
- Drainage of animal production areas.
- Exposure of livestock waste and feed to precipitation or other water; and
- If the CAFO land applies, method for nutrient management planning and source of technical standards.

Some examples of factors that need to be considered by the inspector in assessing whether a CAFO is discharging livestock wastes include:

All Livestock Facilities:

- Facility location, such as whether in a floodplain, slope, and proximity to waters of the State.
- Volume of manure, litter, or process wastewater generated.
- Waste storage system and if designed, constructed, operated and maintained such that a discharge into a water of the State is not occurring.
- Management of storage, treatment and disposal of mortalities.
- Amount of acreage to land apply manure, litter, or process wastewater in accordance with appropriate practices and/or arrangements for disposing of or other means of utilizing nutrients, such as transfer off-site; and the number of acres readily available for land application.
- Type and collective effect of conservation practices, e.g., setbacks and buffers, employed near surface waters, ditches, and other conduits to surface waters to control the runoff of pollutants from land application areas.
- Resources and protocols for proper operation and maintenance at all times of land application equipment, e.g., inspecting hoses and overseeing automatic shut-off valves.
- Management of feed and silage, including management/capture of silage leachate and runoff from feed and silage storage areas.

Dairy Facilities:

- Whether animals are housed under roofs at all times, and if not, management of manure and wastewater generated in loafing areas and other outdoor areas with animal access
- Management of the calving area
- Management of cooling water and footbath water
- Storage or disposal of production area waste, including from milking parlors
- Management of bedding material
- The capacity for manure and wastewater storage, including consideration of proper siting and management of stockpiles and capacity of solid settling basins to hold direct precipitation
- The capacity, siting, and operation and maintenance practices for a vegetated treatment system, where applicable
- Management of manure composting areas
- Cattle access to surface water

Swine Facilities

- Management of pollutants from confinement houses, including consideration of type of confinement houses, pollutants expelled and deposited outside of and around confinement houses from the ventilation system, and design of any drainage features that may relate to management of process wastewater at the CAFO (i.e., whether a conveyance routes water through part of the CAFO and into a water of the State)
- How manure and wastewater is collected and stored, such as in a deep pit under the confinement house or by a containment structure like a lagoon
- Identification of sources of pollutants, such as storage facilities and confinement house ventilation systems, and consideration of whether pollutants come into contact with precipitation or other water to generate process wastewater

Poultry Facilities

- Management of pollutants from confinement houses, including consideration of type of confinement houses, pollutants expelled and deposited outside of and around confinement houses from the ventilation system, and design of any drainage features that may relate to management of process wastewater at the CAFO (i.e., whether a conveyance routes water through part of the CAFO and into a water of the State)

- Identification of sources of pollutants, such as storage facilities, litter handling activities (e.g., cake-outs, crust-outs, whole house clean-outs, etc.), poultry handling, and confinement house ventilation systems, and consideration of whether pollutants come into contact with precipitation or other water to generate process wastewater
- For layer facilities, management of egg production and egg wash water.

During the course of the facility tour, the inspector may determine that he or she needs to see additional records or documents. The inspector will inform the facility representative of these needs as soon as possible to facilitate your retrieving the needed information.

4. Exit Interview

Following the facility tour, the inspector will conduct a debriefing or exit interview with the facility representative. This phase of the inspection is to allow both parties to follow up on the inspection or to clarify issues which arose during the inspection.

To the extent possible the inspector will relay to the facility representative the basic findings of the inspection. The goal of the exit interview will always be to make sure that the facility representative is made aware of any problems or deficiencies found during the inspection, options for correcting the problems, and possible follow-up actions by the Agency. The discussion may also include information about sources of technical assistance available to the operator.

If the inspector needs additional information from the facility representative or some other source to complete his or her evaluation, they may not be able to provide the representative with a final list of their findings.

C. CAFO Inspector Safety Issues

Very few diseases in animals are of concern to humans. However, persons with low immunity can contract a specific respiratory illness from poultry called histoplasmosia. In addition, CAFOs might store pesticides in both concentrated and dilute form. Inspectors should never enter an area where pesticides are being applied. Before entering an area where pesticides have been applied, the inspector should be familiar with the pesticide signs, and should know the type of pesticide applied, the time and date of application, and whether the area is safe to enter.

The other major hazards at CAFOs include toxic gases, drowning, electrocution, and hazards associated with the equipment used for handling, transporting, and applying manure from CAFOs. During an inspection, inspectors must be aware of these potential hazards and seek to avoid the dangers they pose.

Confined spaces at CAFOs, as at other types of facilities, present a safety risk to inspectors. Gases such as hydrogen sulfide, carbon dioxide, ammonia, and methane are present in every manure pile, and if not properly ventilated, can reach concentrations dangerous to humans. Covered or enclosed tank facilities present the greatest danger, especially when manure is being agitated or pumped out of the structures. Silos and silage bunkers also represent a confined-space hazard. CAFO inspectors should ensure that facilities are properly ventilated before entering to conduct an inspection.

Drowning is a possibility where semisolid, slurry, and liquid manures are stored. Manure usually forms a surface crust. The thickness of the crust depends on the moisture content and consistency of the manure. However, under no conditions is the crust solid enough to support a human being. Inspectors should never venture out onto any crusted surfaces during an inspection.

Livestock facility owners or operators use tractors to power pumps when transferring waste out of storage lagoons. The power sources (take-offs) present both electrical hazards and physical hazards for inspectors wearing loose-fitting clothing.

Facilities being washed present an electrocution hazard to the inspector. Wash water might conduct electricity from wiring, connections, or equipment to persons in contact with that water. Inspectors are advised to stay out of facilities during washdown.

Equipment used for handling, transporting, and applying manure can be hazardous to the operator and to others close by. The operator's manual for the equipment should document the potential hazards for that equipment. Common hazards include getting clothing or limbs caught in moving equipment parts; injury from escaping hydraulic fluid; and slippage of tractors, loaders, and spreaders. Inspectors should exercise appropriate caution (e.g., but not wearing loose-fitting clothing) around any machinery encountered during an inspection.

D. Release Reporting Requirements

The Livestock Management Facilities Act requires an owner or operator of a livestock waste handling facility to report any release of 25 gallons or more of livestock waste within 24 hours after discovery of the release into the environment. This reporting requirement includes releases from livestock waste handling facilities and releases from the transportation of livestock waste.

Initial notification should be made by calling the Illinois Emergency Management Agency (IEMA). The IEMA maintains a 24-hour emergency notification line. Information to be reported includes the location, amount, apparent environmental impacts of the release, and actions taken to contain or mitigate the release.

In Illinois: (800) 782-7860
Outside of Illinois: (217) 782-7860

A written report to the Illinois EPA confirming the information provided by telephone is required within five (5) days after discovery of the release. A copy of the "Required Report Information Form" is located in Appendix D.

Written reports should be sent to Illinois EPA, Bureau of Water, Compliance Assurance Section, P.O. Box 19276, Springfield, IL 62794-9276. Faxes may be sent to (217) 557-1407.

Releases of any quantity which enter surface waters, (including releases to sinkholes, drain inlets, broken subsurface drains or other conduits to groundwater or surface water) must be reported immediately, except when immediate notification would impede the owner's or operator's efforts to correct the cause of the release or contain the livestock waste. In such cases, the report must be made as soon as possible but no later than 24 hours after discovery.

In addition to the reporting requirement, the owner or operator is responsible for correcting the cause of the release as soon as possible, in order to minimize environmental damage.

The reporting requirement applies to waste storage, handling facilities, piping, pumps, and transportation equipment. Reporting is not required for releases of less than 25 gallons provided no quantity is released to waters of the state or from a controlled and recovered release during field application. A release does not include the normal application of livestock waste to cropland at established agronomic rates.

E. Emergency Response

During normal business hours (Monday through Friday, 8:30 a.m. - 5p.m.) release reports from any party that come to the Office of Emergency Response (OER) are logged into a central database by OER staff and assigned to a responder. The responder's objective is to determine the details of the release including, but not limited to, identifying the responsible party, when and how the event occurred, what impacts to the environment occurred and what threats to the environment may still occur, what remedial action needs to be taken, and the schedule for taking any further actions on the incident. The responder may, in conjunction with other Illinois EPA staff, determine what actions to take. These actions may include

referring Incident Management to the Division of Water Pollution Control (DWPC) staff. When Incident Management is transferred, OER staff will coordinate with DWPC staff, including the DWPC-Field Operations Section (FOS) manager and regional office staff, to assure that staff are available, that DWPC staff have been assigned, and that all pertinent incident information and data are transferred from OER staff to DWPC staff.

Business hours release reports may also be taken by DWPC staff and, in the case of livestock waste incidents, are assigned to trained NPDES inspectors (or other appropriate staff as may be determined by the DWPC-FOS manager). Assigned staff have the same responsibilities as the OER responder. Regardless of the responder, either from OER or DWPC, proper forensic data acquisition and management is required since these incidents may result in civil and criminal enforcement by the Illinois EPA.

Incidents that are reported during non-business hours are handled by the Illinois Emergency Management Agency (IEMA), which may then notify several Illinois departments and agencies of the event. Notification from IEMA to Illinois EPA during non-business hours is taken by an assigned Agency Duty Officer (ADO). The ADO assignments are set on a weekly basis. The ADO can react to the IEMA notification by acquiring additional information to assist in the Illinois EPA response or direct the incident information to the appropriate Illinois EPA staff for appropriate action. In cases involving livestock waste releases, transfer of information is typically to the NPDES trained DWPC-FOS staff. Initial incident communication is handled by the ADO or the DWPC-FOS section manager who is responsible for notifying:

- staff to respond to the release,
- senior Illinois EPA management in cases that may involve significant impacts to the environment (e.g., fish kills, impact to human health)
- Illinois EPA's public information officer so that media inquiries may be addressed.

Should an NPDES trained inspector be notified of an emergency livestock waste release by during non-business hours, the inspector should contact their immediate supervisor of the release notification. Approval for overtime should be obtained from the Agency management prior to working during non-business hours. It is also pertinent that a sufficient supply of sampling containers and equipment be maintained by at the Regional Office if such emergencies that may arise. Typical parameters sampled during livestock waste emergencies include pH, five-day biochemical oxygen demand (BOD_5), fecal or total coliform bacteria, total suspended solids (TSS), ammonia nitrogen, nitrates, nitrites, and phosphorus. Please refer to the Agency's "A Field Guide for Environmental Sampling" (Appendix F) for proper sample bottle types and sizes. If samples are collected by the inspector during non-business hours, the inspector must notify their immediate supervisor so that arrangements may be made with the Illinois EPA Springfield Laboratory to ensure that personnel are available at

the lab to process the collected samples. Depending on the sample(s) holding times, the inspector should also discuss with their immediate supervisor the method to transport samples to the laboratory. This may include shipping or driving the samples directly to the Illinois EPA Springfield Laboratory. Please refer to the Agency's "A Field Guide for Environmental Sampling" (Appendix F) for specific sample holding times.

Illinois EPA will coordinate field activities, share data and communicate with the Illinois Department of Natural Resources in incidents involving fish kills. This communication will occur at the beginning of the event once sufficient information is known about the incident and when the confirmation of a fish kill has been determined.

In certain cases that may threaten human health or involve the contamination of public swimming beaches, public recreational areas, state or local parks, the Illinois EPA PIO may issue a press release to advise the public of the livestock release, potential threats and recommended precautions. In these cases, the PIO may consult with their counterpart at the Illinois Department of Public Health and the local health department.

DWPC and OER will also coordinate with local public health authorities in regard to potential impact to private wells.

In issuing external communications, caution will be used in releasing information that may impede further investigative efforts or incriminate parties that have not been properly notified.

OER and BOW coordinate, as necessary, to assure appropriate, adequate information and data are collected at each incident. This may involve joint efforts, investigations of downstream impacts, and elimination of other potential sources. At the earliest opportunity, BOW staff relieves OER of additional investigative and follow up activities. Transitions of incident management between OER and BOW are coordinated on a case-by-case basis, with the overall expectation that BOW will handle incidents to the greatest extent possible (thereby allowing OER staff to address other incidents that may occur after hours and on weekend/holidays).

Sample Collection

Sample collection is an essential part of a water pollution control investigation. The goal of sampling should be to collect samples in a location and manner so as to be representative of the stream or discharge being sampled, free from the influence of other sources of water or wastewater, and handle the sample in such a way that it is properly preserved for delivery to the laboratory. Since any sample may become important in a future legal proceeding, proper sampling procedures must be followed. An important reference for field staff is "A Field Guide for Environmental Sampling" prepared by the Agency's Division of laboratories. A copy of the sampling field guide is located in Appendix F.

CAFO inspection sampling primarily is focused on documenting evidence of an unauthorized discharge to waters of the United States. Inspectors might not know whether they will be able to collect samples prior to arriving at the site but should be prepared to do so. In addition, if there is no discharge at the time of the inspection, inspectors might wish to identify and document likely pathways that a discharge would follow and the name and location of the receiving waters if such a discharge event should occur in the future.

Preparation for sampling is often based on a sampling plan. The plan is usually developed by the inspector, with input from laboratory personnel and legal counsel as appropriate. A sampling plan includes the objectives of the sample, data needs, parameters to be sampled, methods, volumes and holding times of samples, documentation and transport, and quality control procedures. The remainder of this section covers the various elements typical of sampling plans.

Typical parameters sampled at CAFOs are those which readily show an effect on water quality by the discharge. These might include pH, five-day biochemical oxygen demand (BOD_5), fecal or total coliform bacteria, total suspended solids (TSS), ammonia nitrogen, nitrates, nitrites, and phosphorus. Many other parameters, however, may appropriately be sampled to document such discharges. Sampling of any one or a combination of these parameters can aid the inspector in documenting discharges.

Grab samples are traditionally collected for CAFO facility discharges. A grab sample is defined as an individual sample collected over a period of time not exceeding 15 minutes. The sample should be collected directly into the sample bottles provided by the laboratory whenever possible. Care should be taken so as not to overflow bottles containing preservatives. Samples should be collected so as to avoid the inclusion of stirred up sediments, solids, or debris. If such material enters the bottle during collection, the sample should be discarded and another one collected.

At a minimum, to effectively show impact on a receiving stream samples should be collected upstream of the discharge, downstream of the discharge, and at the confluence before the discharge enters the stream. The upstream sample should be collected at a reasonable distance from the discharge where the stream is not influenced by the discharge but representative of the entire stream flow. Care should be taken to avoid oddities or backflow caused by the discharge. Samples collected downstream of the discharge should be collected at a point where the stream and the discharge have become completely mixed. Judgment in the field is necessary to determine this point, although a distance of 600 feet may be used a general rule-of-thumb in small to medium streams.

Each sample and its corresponding lab sheet must be properly identified. Upstream samples should be assigned the letter "A". The initial downstream sample should be given the letter "C" designation. Additional downstream samples shall be labeled as "C-1", C-2", etc. Samples collected from the discharge point shall be labeled with a letter "B". Bottles should be labeled prior to sample collection in order to eliminate the possibility of mixing up samples and to facilitate marking on the bottles. The lab sheet should be filled out at the time of sample collection including observations related to any unusual characteristics of the sample and any deviations from normal procedure in collecting or handling the sample.

Chain of custody procedures must be followed during and after sample collection. A chain of custody is assured when samples are documented to be in the possession of an authorized person or the samples are stored in a secure location where the sample cannot be altered. An inspector is responsible for all samples in his or her possession. Each person collecting or transporting the sample must be identified on the sample's lab sheet. To ensure maintenance of the chain of custody, samples should not be left unattended, except in a locked vehicle, a locked cooler, or a secure location at the regional office or laboratory.

Samples must be put on ice or ice packs immediately after collection to retard the chemical and biological changes within the sample bottles. However, do not allow the sample to freeze. Water should be intermittently drained off sample coolers to avoid submergence of sample bottles.

Post-Inspection Activities

Effective follow-up action is a necessary component of all field activities, including CAFO inspections. The most important follow-up is effective communication of the inspection findings to the owner and to the appropriate Agency staff.

If no deficiencies or violations are found after completion of the inspection and subsequent report, the process ends. If violations are found, one of the following actions may be initiated depending on the seriousness of the problems:

1. **Noncompliance Advisory Letter**: When relatively minor problems are found, a Noncompliance Advisory (NCA) letter may be sent to the facility owner or operator. This letter will document the violations of water or air pollution control regulations and laws observed during the inspection, and include recommendations for correcting the problems.

2. **Violation Notice**: More serious violations or failure to correct problems noted in a Noncompliance Advisory may result in a Violation Notice (VN) letter to the facility from Illinois EPA headquarters in Springfield. Examples of violations that may lead to this response include livestock waste releases causing water quality violations, or documented instances of air pollution. The Violation Notice contains a description of the alleged violations and actions that the Agency believes may resolve the violations, and begins a series of steps described in the Illinois Environmental Protection Act. These steps include an opportunity to meet with the Illinois EPA and to propose a Compliance Commitment Agreement to resolve the violations. If no agreement is reached, or the compliance commitment is not met, the Illinois EPA may follow up with a notice that it intends to pursue legal action. This notice provides an opportunity for a second meeting with the Agency; if the violations still remain unresolved, the matter may be referred to the Illinois Attorney General, the U.S. Environmental Protection Agency, or a county State's Attorney's office for enforcement.

3. **Request for Injunctive Relief**: Section 43 of the Environmental Protection Act allows the Illinois EPA to request an injunction from the local circuit court to halt an activity causing or contributing to "substantial danger to the environment or to the public health of persons or to the welfare of persons where such danger is to the livelihood of such persons." A significant release of livestock waste to waters of the United States or a serious ongoing air pollution episode meeting the above criteria are some of the violations that could trigger this response.

Inspection Reports

Inspection reports prepared by FOS staff serve two obvious purposes: 1) to communicate the findings of an inspection to other Agency staff members, and 2) to provide documentation to supplement the memory of the inspector during later discussions and possible enforcement proceedings. The inspector's report may be used as a basis for refreshing the inspector's memory for any required testimony. To ensure that inspections adequately serve these functions, it is essential that they be accurate, factual, and objective.

A written report should be prepared for each CAFO inspection. The written report should be submitted within sixty (60) days of the inspection date. However, if samples are collected during the inspection, the report should be submitted within thirty (30) days of receipt of laboratory sample analyses. The written report may include the "CAFO Inspection Checklist" alone (with photographs and sample results, if any were taken) or accompanied by a supplemental written narrative report. Appendix A includes a copy of the Agency's inspection checklist. In addition, a general facility site map should accompany all CAFO written inspection reports.

If any deficiencies or apparent violations are noted during the CAFO inspection, a narrative description of these deficiencies or apparent violations should be contained within the "Other Comments/Notes" section of the checklist or accompany the inspection checklist in a supplemental written narrative report. Photographic evidence should be collected at the facility to accurately document any deficiencies or apparent violations observed during the inspection. Also, photographs should be taken to accurately document corrective action(s) taken by a facility to correct previously noted deficiencies or apparent violations. If the facility is discharging livestock waste at the time of the inspection or if there is evidence that the facility has recently discharged, representative samples should be collected when feasible. (Refer to Page 28-29 for "Sample Collection" guidance.)

For a livestock facility with an existing NPDES Permit, EPA Form 3560, with Single Event Violation (SEV) codes, should be completed. The form should be attached as the cover sheet to the inspection report. Appendix B includes a copy of the EPA Form 3560.

A copy of the report should be maintained at the regional office as well as transmitted to Bureau of Water's Records Unit (RU) at headquarters and any other appropriate Agency staff. In addition, copies of all other correspondence received by field staff must be forwarded to the RU.

A copy of the inspection report, including photographs, sample sheets, facility site maps, and other relevant information, should be sent to the facility owner or operator within ninety (90) days of the inspection date. If samples are collected during the inspection, a copy of the report should be sent within sixty (60) days of receipt of laboratory sample analyses. In some cases,

however, it may not be appropriate to send copies of the inspection report to facilities, such as those for which enforcement is proposed or is underway.

In some cases it may be necessary to convey opinions or legal action recommendations in writing to DLC. A separate memorandum should be prepared containing only these opinions or recommendations. Such memorandums should be clearly marked "confidential" and addressed to the appropriate Agency attorney, with no other copies shown. These memorandums would be considered attorney-client communication not subject to discovery during an enforcement proceeding, and allows the Agency's position to be developed without potentially jeopardizing a legal proceeding.

Field Staff should be aware that any field notes or other documents used to prepare an inspection report are subject to the Freedom of Information Act and discovery. Therefore, any written field notes should be retained by the CAFO inspector, even after completing the formal, written inspection report.

The following elements should be considered when writing a narrative CAFO inspection report:

A. Objective

Inspection reports must be objective, impartial, unbiased, and unemotional. The inspector must be a conduit of the facts gathered during the inspection. These facts should be conveyed such that they speak for themselves. Avoid distortion by being aware of the emotional tone of words. An attempt to emphasize the significance of the evidence may be held against you and materially diminish the value of the report.

B. Quality

The overall quality of the inspection report may depend on how a CAFO inspector communicates his or her findings to the reader.

1. Exact

A CAFO inspection report writer should precisely and accurately say what is meant to say in plain language. Precision depends on dictation, phrasing, and sentence structure.

2. Quotes

Use good judgment in determining whether to quote or to paraphrase a witness. Consider such factors as the significance, importance, or length of the statement. If you quote, use the person's exact words: otherwise, omit quotation marks from the report.

3. Personal comments, personal opinions

Any personal comments and/or opinions should <u>not</u> be included in the CAFO inspection report.

4. **Facts**
   The CAFO Inspection report must only contain factual information gathered during the inspection report.

5. **Accurate**
   The accuracy of your inspection report should be properly verified and reviewed before the final report is submitted. A typographical error in date or time may cast doubts on other facts in the report.

C. Concise

Simplicity in writing is not easily accomplished, especially if the subject matter is complex. Try to remove all that is elaborate or non essential without omitting the facts, details, and necessary explanations. Readers of an inspection report are interested in getting the facts and getting them as quickly as possible.

D. Complete

A good report should provide a complete picture to the reader. The inspection report should include all information that is relevant. Use good judgment in deciding which facts are relevant and what material should be included. If in doubt, include them. Completeness implies that all the known facts and details have been reported so that no further explanation is needed. The report is complete if it answers the questions of who, what, when, where, why, and how.

The following standardized format has been developed by the Agency for use in preparing a written narrative report of a CAFO inspection. On the cover page of each narrative inspection report, the following general information should be provided to the reader:

Inspection Date: The date the inspection was conducted should be listed.

NPDES Permit Number: If the facility has an NPDES Permit, the permit number should be listed.

Illinois EPA Representatives: The inspector's name and any other Agency inspectors present during the inspection should be listed.

Facility Owner/Operator: The name, mailing address, home telephone number, and telephone number should be listed.

Facility Employees: The names of any facility employees should be listed.

Interviewed: The identity of the inspection contact should be listed.

Weather Conditions: A general description of the weather at the time of the inspection should be listed. This includes precipitation, temperature, wind direction, etc.

Report Prepared By: The Agency inspector preparing the report should be listed.

Report Date: The date the report was completed should be listed.

The narrative inspection report should be written in first person. The report should contain three main sections. These include background information concerning the CAFO, observations made during the inspection, and the inspector's findings made during the inspection.

1. "Background" Section

The purpose of this section is to provide background information concerning the facility inspection. This section should include the reason for the inspection (routine compliance, follow-up inspection, complaint, emergency response, etc.), previous inspection and violation history/summary, record review information, and general site information. Site information should include the type of facility, approximate number of livestock at the facility, information regarding the number/type of confinement buildings, types of confinement areas, and number/type of waste storage structures.

It should be noted that specific information concerning the identity of a complainant should not be included in this section.

2. "Observations" Section

This section of the narrative inspection report should effectively document observations made by the inspector during the CAFO inspection. All pertinent, relative facts about the inspection are to be included. The section should fully document the following areas of the inspector's on-site activities:

- Entry interview
- Record/document review
- Facility tour
- Exit interview
- Sample collection

3. "Findings" or "Conclusions" Section

This section should contain a brief synopsis or summary of the facility inspection and the inspector's findings. The inspector's determination concerning the need for an unpermitted

facility applying for a permit should be included in this section. Any violations or deficiencies observed during the inspection should be listed in this section. In addition, recommendations for compliance should also be listed.

A signature block should be located at the end of the narrative report for the CAFO inspector's signature. This block must be signed by the CAFO inspector at the time of report completion.

Attachments to narrative inspection reports include photographs, sample sheets, facility site maps, and other relevant information. These attachments may be are necessary to properly document deficiencies or apparent violations observed during the CAFO inspection. Photographs and sample results should be accompanied by appropriate documentation of location, date, time, and the identity of the photographer or sampler.

APPENDIX A

APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E

APPENDIX F